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KENYON & KENYON 1500 K STREET, N.W., SUITE 700 WASHINGTON, DC 20005				
EXAMINER MANOSKEY, JOSEPH D				
ART UNIT		PAPER NUMBER		

2113

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7

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/818,788

Applicant(s)

ABDO ET AL.

Examiner

Joseph Manoskey

Art Unit

2113

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 9 and 11-18 is/are rejected.
- 7) ☒ Claim(s) 6, 8, 10, 12, and 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6. 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities:
2. On page 3, line 2 of paragraph 16 the reference number "160" is disclosed as the "EBC", but on line 1 of paragraph 17 it is disclosed as "a selection multiplexer".
3. On page 10, line 3 of paragraph 41, the term "256 memory" should be replaced with "256K memory".
4. On page 11, line 6 of paragraph 42, the term "internal queue" is with reference number "430", but in figure 5 the "internal transaction queue" is with reference number "460".
5. On page 11, line 2 of paragraph 43, the term "arbiter" is with reference number "430", but in figure 5 the "arbiter" is with reference number "440".
6. On page 12, lines 4, 6, and 8, the use of references "510-560", "510-540", and "520-560" respectively imply there are more agents in figure 6 than there are, (i.e. "511", "512", "513", etc.). Also it suggests that the "VFUB 515" is an agent.
7. On page 13, line 2 of paragraph 51, the use of reference "610-630" implies there are more agents in figure 7 than there are, (i.e. "611", "612", "613", etc.). Also it suggests that the "VFUB 625" is an agent.

Appropriate correction is required.

### ***Claim Objections***

8. Claim 12 is objected to because of the following informalities:

Claim 12 is written as being dependent on claim 10. This is believed to be a typographical error and for the purposes of further examination claim 12 will be interpreted as being dependent on claim 11.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The last line of Claim 9 states "a second cache line directed to a second portion of the cache line" is indefinite. It is unsure whether the claim should state "a second address directed to a second portion of the cache line" or "a second cache line directed to a second portion of the second cache line".

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1-4 and 11-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Coyle et al., U.S. Patent 6,609,221, which will hereinafter be referred to as "Coyle".

12. Referring to claim 1, Coyle discloses an integrated circuit having a core logic, which is interpreted as a processing core, a bus interface, and a bus testing logic coupled to the interface, which is interpreted as a validation FUB (See Fig. 1). Coyle also discloses signal control circuitry "408" (See Col. 9, line 56), having an arbiter, the mux "444" is interpreted as an arbiter, connected to the bus interface (See Fig. 4A and Col. 9, lines 65-67).

13. Referring to claim 2, Coyle teaches the validation FUB being coupled to the arbiter (See Fig. 4A).

14. Referring to claim 3, Coyle teaches the validation FUB comprising a pattern storage, which is interpreted as a transaction latch, coupled to the bus interface (See Fig. 4A and Col. 7, line 34-35). Coyle also teaches a pattern source, interpreted as a request library, in communication with the transaction latch and coupled to the bus interface (See Fig. 4A and Col. 7, line 32-34).

15. Referring to claim 4, Coyle teaches the pattern source can also include a pattern generator, this is interpreted as an address manipulator, which is attached to the request library and the bus interface (See Col. 9, lines 35-37).

16. Referring to claim 5, Coyle teaches stress testing (See Col. 4, lines 26-38). Coyle discloses capturing a bus transaction, and upon meeting a loop-back condition generating an echo cycle (See Fig. 2B), the echo cycle is interpreted as a harassing bus transaction.

17. Referring to claim 7, Coyle teaches the echo cycle or harassing bus transaction being a replica version of the captured bus transaction (See Col. 6, lines 21-25), this is

interpreted as the echo cycle bus transaction containing the same address as the first bus transaction.

18. Referring to claim 11, Coyle discloses an integrated circuit having a bus testing logic, which is interpreted as a validation FUB (See Fig. 1). The bus testing logic contains a pattern storage module for receiving patterns after it traversed the bus, capturing external bus transactions (See Fig. 4A and Col. 7, lines 34-35). Also contained in the bus testing logic is a pattern source that includes a pattern generator for providing signals to apply to the bus (See Fig. 4A, Col. 7, lines 32-33 and Col. 9 lines, 36-38).

19. Referring to claim 12, Coyle discloses the validation FUB comprising a pattern storage, which is interpreted as a transaction latch, coupled to the bus interface (See Fig. 4A and Col. 7, line 34-35). Coyle also teaches a pattern source, interpreted as a request library, in communication with the transaction latch and coupled to the bus interface (See Fig. 4A and Col. 7, line 32-34). Coyle finally discloses a diagnosis state machine, which is interpreted as a controller, coupled to the transaction latch (See Fig. 4A).

20. Referring to claim 13, Coyle discloses a computer system comprising a plurality of agents, each coupled to a common bus, and one of the agents including a validation FUB (See Fig. 7, and Col. 11, lines 10-16).

21. Referring to claims 14-16, Coyle discloses one of the agents being a CPU, a memory module, and an I/O module (See Fig. 7).

22. Referring to claim 17, Coyle discloses the validation FUB comprising a pattern storage, which is interpreted as a transaction latch, coupled to the bus interface (See Fig. 4A and Col. 7, line 34-35). Coyle also teaches a pattern source, interpreted as a request library, in communication with the transaction latch and coupled to the bus interface (See Fig. 4A and Col. 7, line 32-34). Coyle finally discloses a diagnosis state machine, which is interpreted as a controller, coupled to the transaction latch (See Fig. 4A).

23. Referring to claim 18, Coyle teaches stress testing (See Col. 4, lines 26-38). Coyle discloses a bus protocol that only allows bus lines to be asserted during certain times and has a "dead time" between bus cycles (See Col. 6, lines 52-62).

***Allowable Subject Matter***

24. Claims 6, 8, 10, and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 5,142,673 to De Angelis et al.

U.S. Patent 6,618,775 to Davis

U.S. Patent 6,018,807 to Larson

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Manoskey whose telephone number is (703) 308-5466. The examiner can normally be reached on Mon.-Fri. (8am to 4:30pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (703) 305-9713. The fax phone number for the organization where this application or proceeding is assigned is (703)-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

JDM  
December 12, 2003

  
ROBERT BEAUSOLIEL  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100